Fig. 1 Prior Art

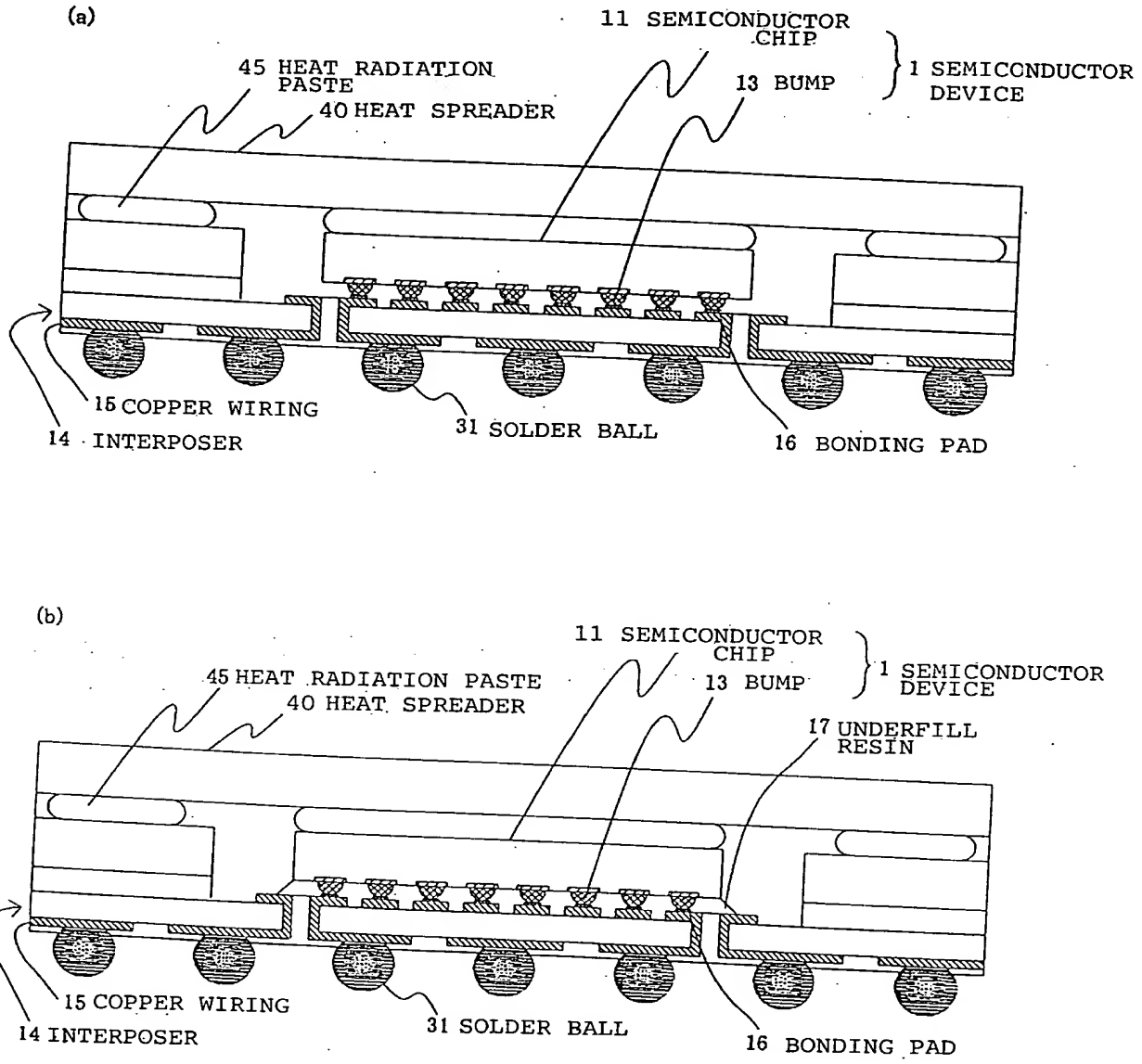


Fig. 2 Prior Art

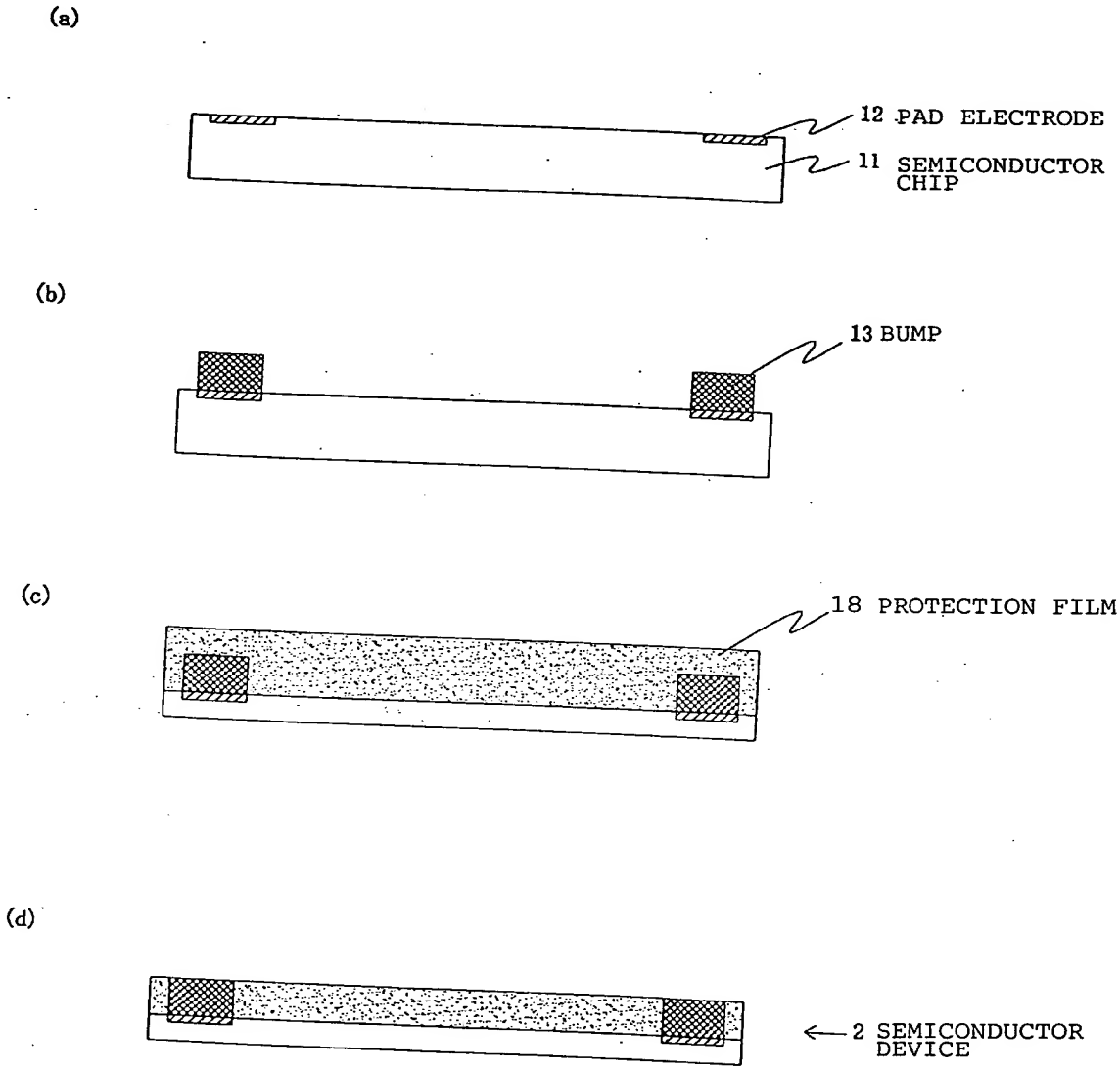


Fig. 3 Prior Art

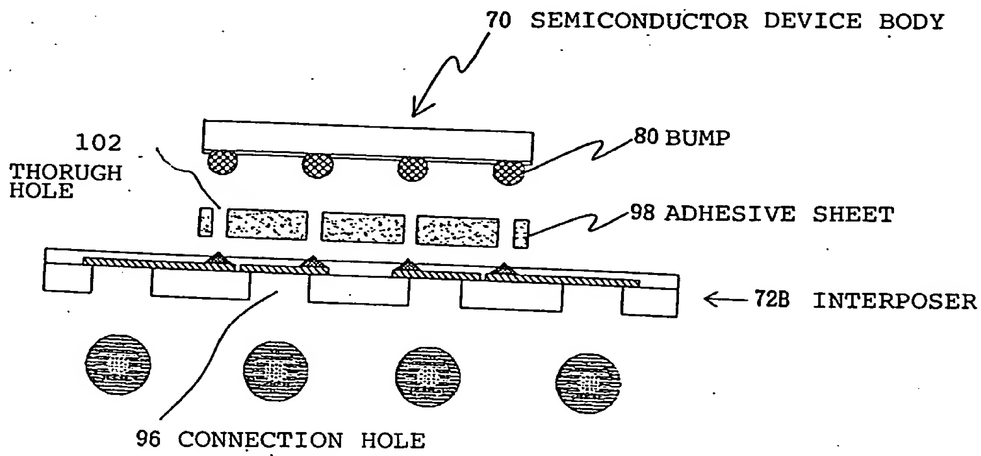
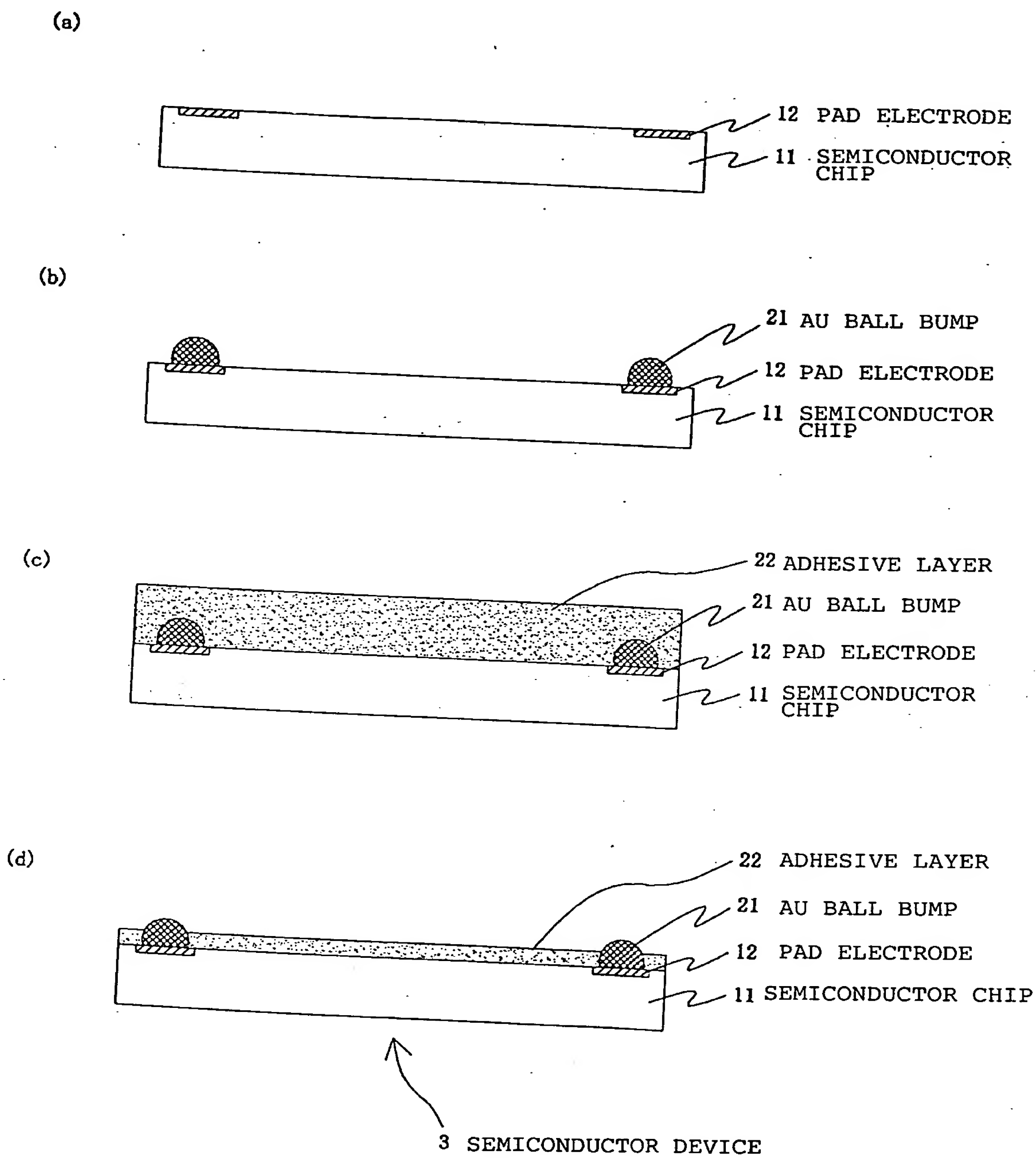


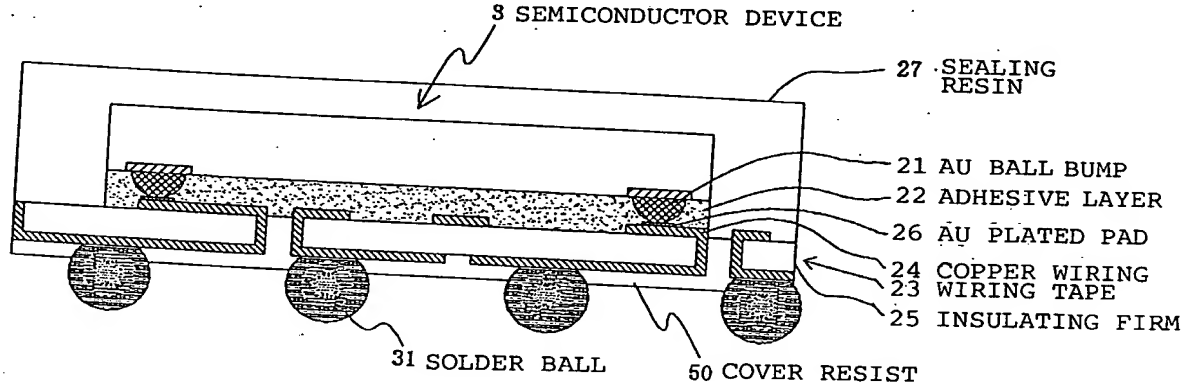
Fig. 4



(a)
12 PAD ELECTRODE
11 SEMICONDUCTOR CHIP
(b)
21 AU BALL BUMP
12 PAD ELECTRODE
11 SEMICONDUCTOR CHIP
(c)
22 ADHESIVE LAYER
21 AU BALL BUMP
12 PAD ELECTRODE
11 SEMICONDUCTOR CHIP
(d)
22 ADHESIVE LAYER
21 AU BALL BUMP
12 PAD ELECTRODE
11 SEMICONDUCTOR CHIP
3 SEMICONDUCTOR DEVICE

Fig. 5

(a)



(b)

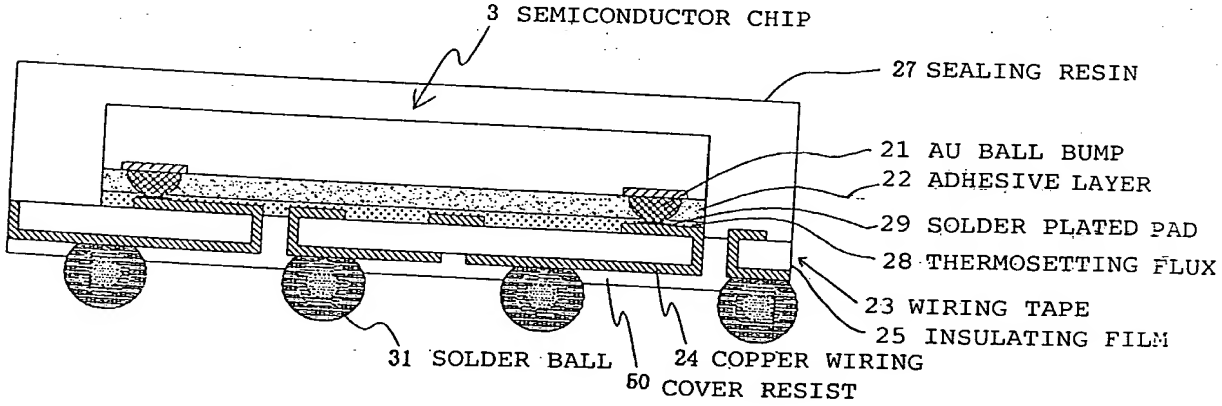


Fig. 6

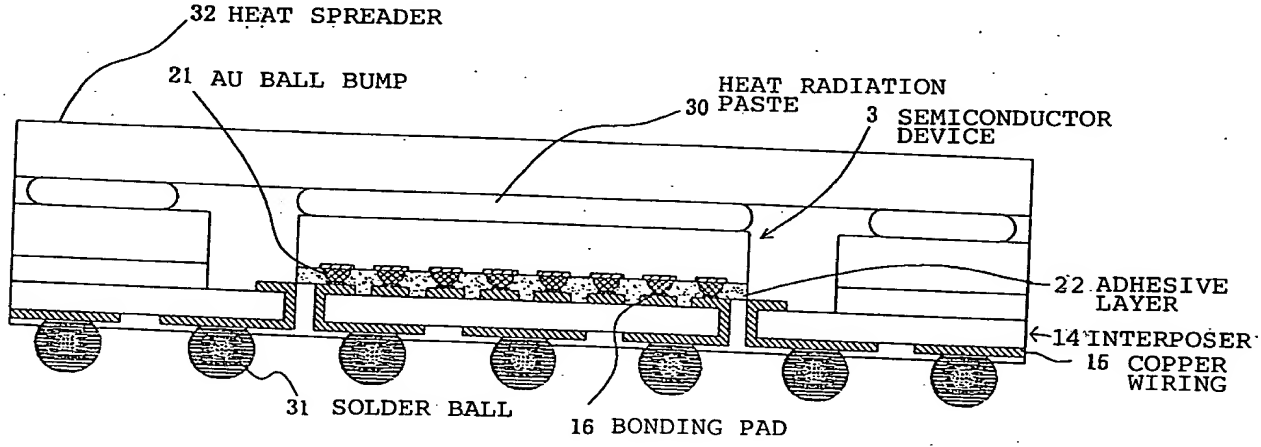

32 HEAT SPREADER
21 AU BALL BUMP
HEAT RADIATION
30 PASTE
3 SEMICONDUCTOR DEVICE
22 ADHESIVE LAYER
14 INTERPOSER
15 COPPER WIRING
31 SOLDER BALL
16 BONDING PAD

Fig. 7

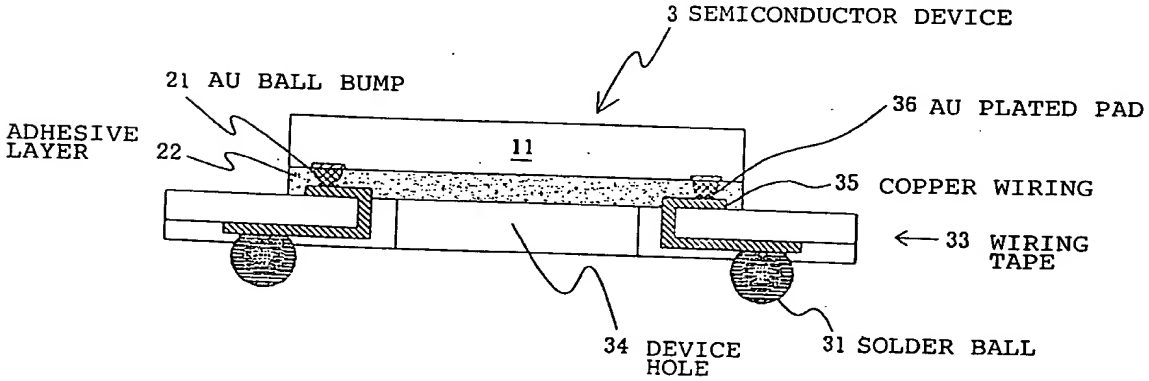

3 SEMICONDUCTOR DEVICE
21 AU BALL BUMP
36 AU PLATED PAD
ADHESIVE LAYER
22
11
35 COPPER WIRING
33 WIRING TAPE
34 DEVICE HOLE
31 SOLDER BALL

Fig. 8

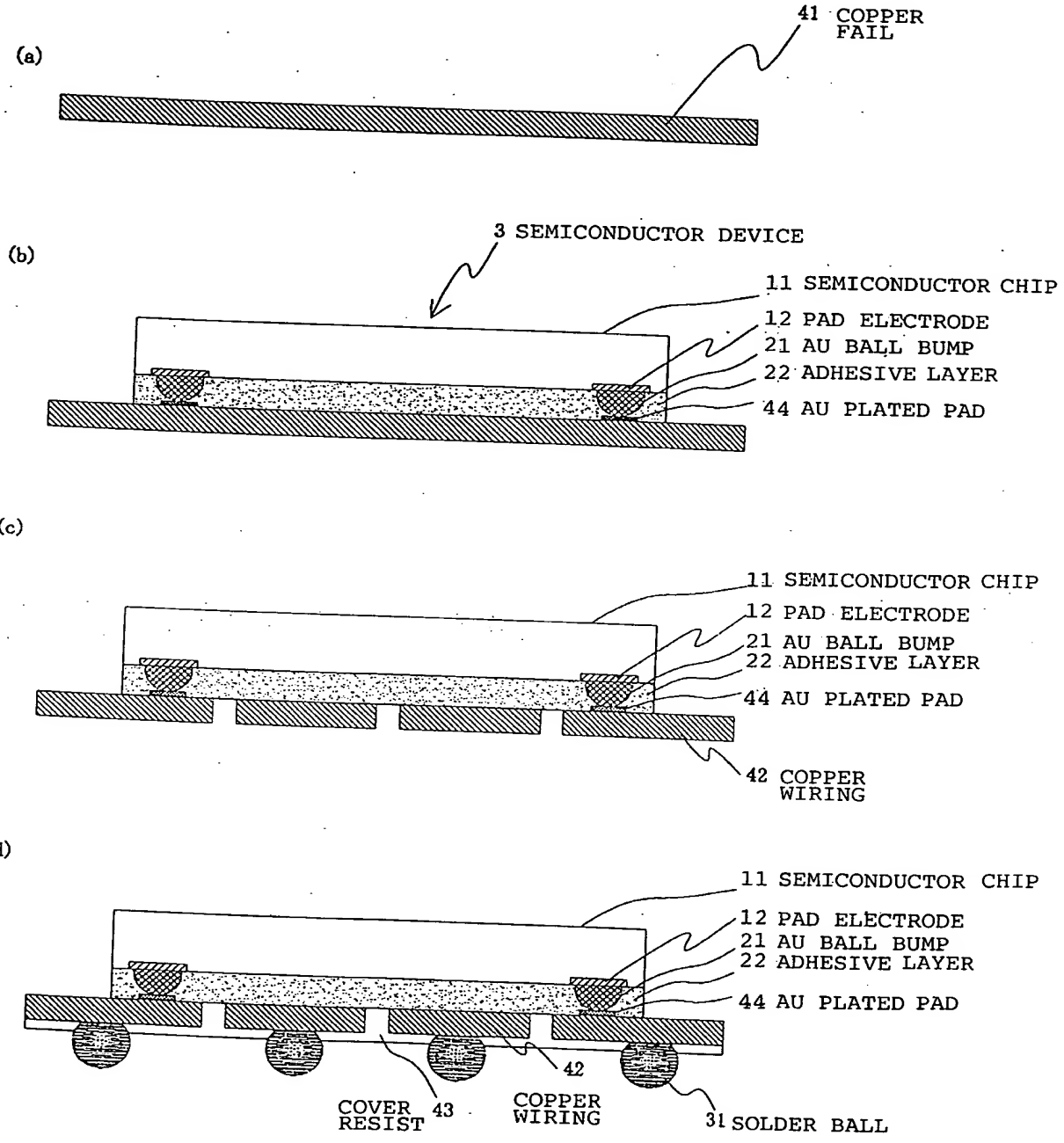
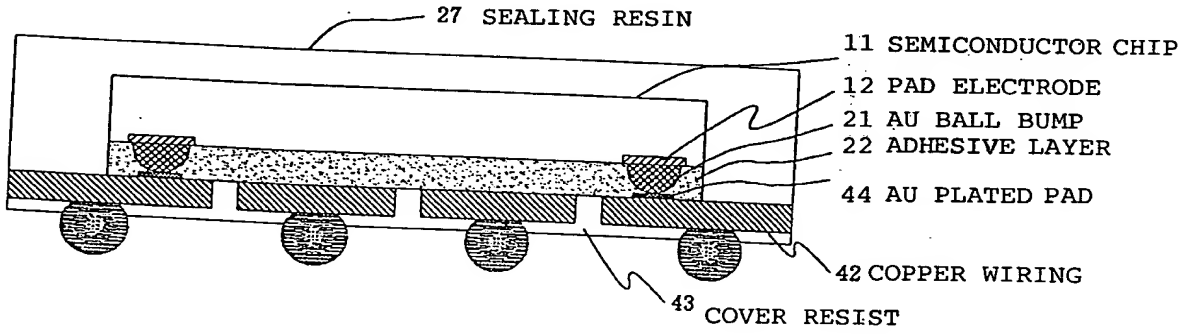


Fig. 9

(a)



(b)

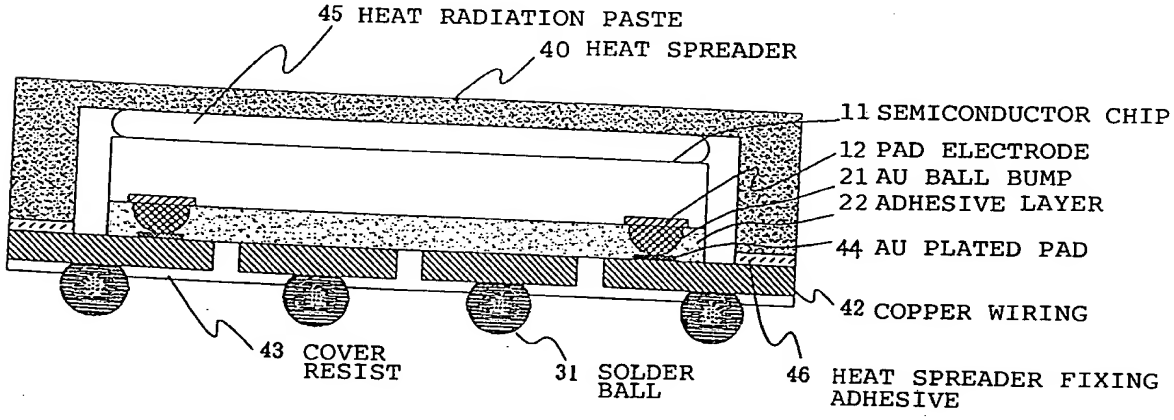
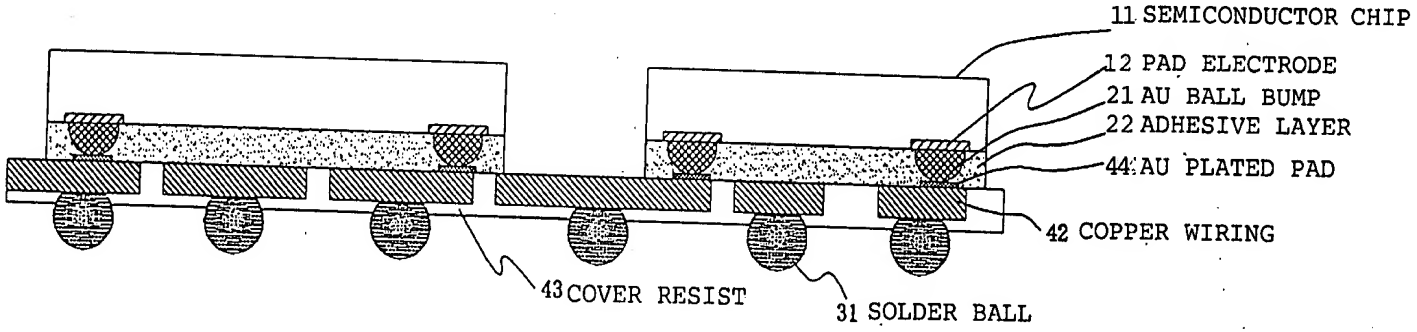


Fig. 10

(a)


11 SEMICONDUCTOR CHIP
12 PAD ELECTRODE
21 AU BALL BUMP
22 ADHESIVE LAYER
44 AU PLATED PAD
42 COPPER WIRING
43 COVER RESIST
31 SOLDER BALL

(b)

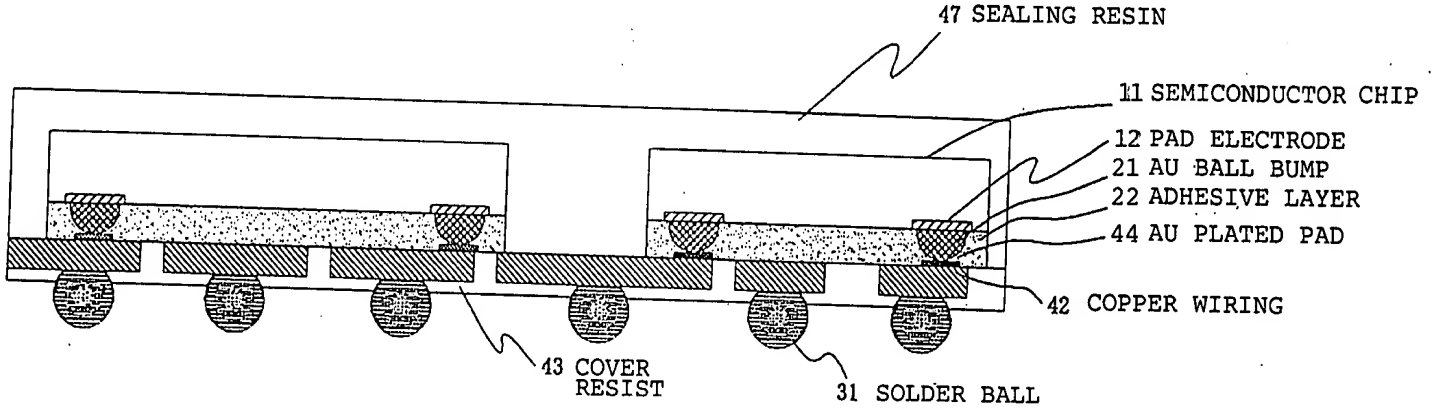

47 SEALING RESIN
11 SEMICONDUCTOR CHIP
12 PAD ELECTRODE
21 AU BALL BUMP
22 ADHESIVE LAYER
44 AU PLATED PAD
42 COPPER WIRING
43 COVER RESIST
31 SOLDER BALL

Fig. 11

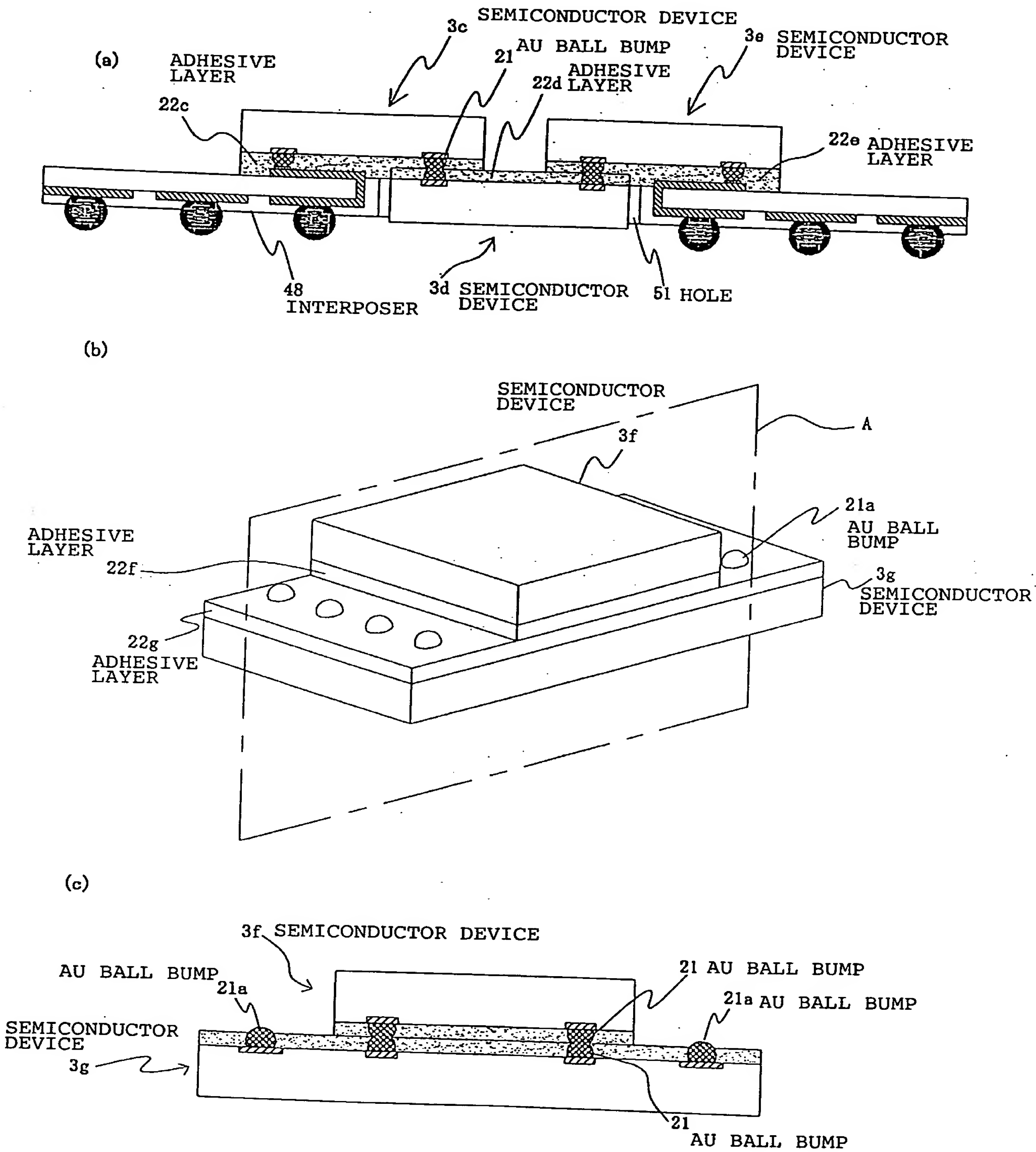


Fig. 12

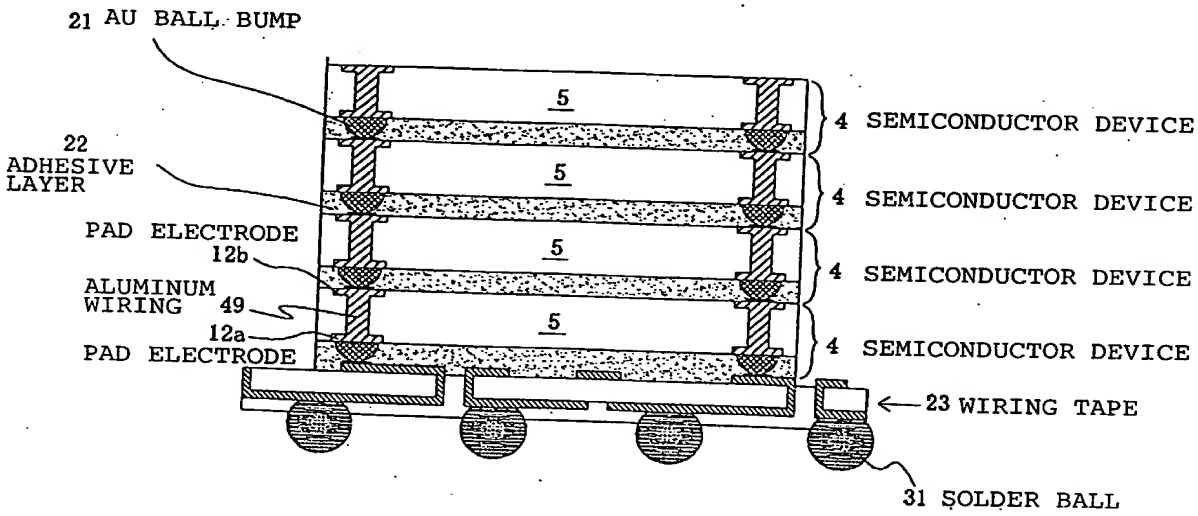
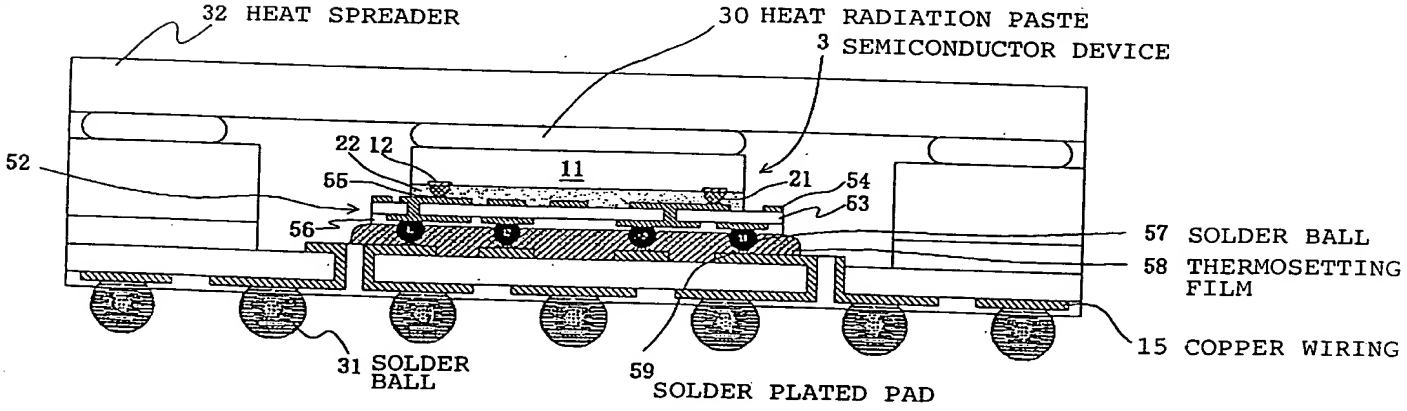

21 AU BALL BUMP
22
ADHESIVE
LAYER
PAD ELECTRODE
12b
ALUMINUM
WIRING
49
12a
PAD ELECTRODE
5
4 SEMICONDUCTOR DEVICE
23 WIRING TAPE
31 SOLDER BALL

Fig. 13


32 HEAT SPREADER
30 HEAT RADIATION PASTE
3 SEMICONDUCTOR DEVICE
52
22 12
11
55
21
54
53
56
57 SOLDER BALL
58 THERMOSETTING
FILM
15 COPPER WIRING
31 SOLDER
BALL
59
SOLDER PLATED PAD